



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D3628-3

Job Sheet 168613



Part No: D3628-3

Job Qty: 250 ea

Part Name: Cupped Washer



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/20/17

Job Tracking No:

Due Date: 12/20/17

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG REV C IPP Rev:A New Issue 07-05-28 JLM IPP Rev:B Removed Powder Coat 07-07-11 JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	250 pcs		12/20/17	0.00	0.00	Purchasing		Chantal 15-12-17
110	Packaging	250 pcs		12/20/17	0.00	0.00	Packaging2		Chantal 15-12-17
120	QC	250 pcs		12/20/17	0.00	0.00	QC6		38
130	Packaging	250 pcs		12/20/17	0.00	0.00	Packaging3		2017-12-15 2017
140	QC21-SA	250 Ea		12/20/17	0.00	0.00	QC21		2017-12-15 2017

Part Op 100 - Issue P/O: 038414 Laser Cut D3628-1 flat pattern and form as per Dwg D3628-1
Descriptions: 110 - Ensure material certification is attached

NOV 20 2017

DEC 15 2017

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
100-Purchasing	D3628-3P	250	0	0	0

Part Specifications

Specifications could not be found.

Plex 11/20/17 9:44 AM dart.lavoie.chantal

DART
AEROSPACE
S022806



Cupped Washer

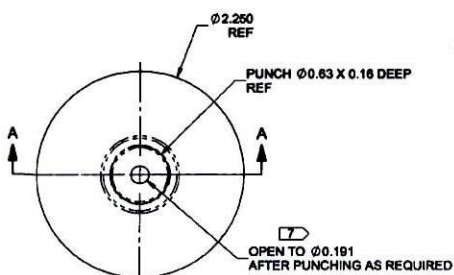
PART NO:
Revision:
Operation:
Change No:

D3628-3

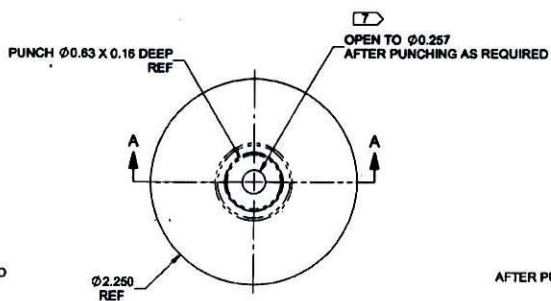
Purchasing

Mfg Date: 12/15/17
Job No: 168613

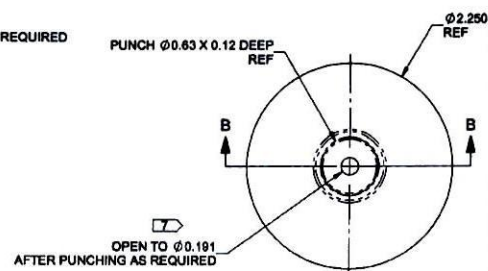
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



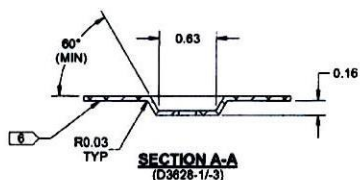
D3628-1 CUPPED WASHER



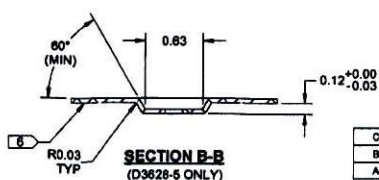
D3628-3 CUPPED WASHER



D3628-5 CUPPED WASHER



SECTION A-A
(D3628-1/3)



SECTION B-B
(D3628-5 ONLY)

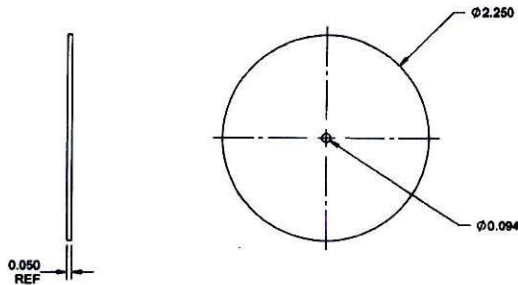
- NOTES:**
- 1) MATERIAL: MADE FROM D3628-1F
 - 2) FINISH: NONE
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 8.5
 - 7) WHEN DRILLING OUT THE CENTRE HOLE AFTER PUNCHING, ENSURE THAT THE HOLE IS DRILLED CONCENTRIC TO THE CUPPED AREA, WITHIN 0.03
 - 8) WEIGHT: 0.02 lbs

RELEASE
2012-05-07

C	UPDATE DWG TO CURRENT STD; ADD -5, 2N C1-1.	DC	12.04.19
B	REMOVE POWDER COAT	CB	07.07.09
A	NEW ISSUE	CB	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DC		
DRAWN	DC		
CHECKED	DC		
MFG. APPR.	DC		
APPROVED	DC		
DE APPR.	DC		
DATE	12.04.19		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3628	REV. C
TITLE CUPPED WASHER	SHEET 1 OF 2
SCALE NTS	

COPYRIGHT © 2007 BY DART AEROSPACE LTD
THIS DOCUMENT IS UNCLASSIFIED, AND IS AVAILABLE FOR REPRODUCTION BY ANY INDIVIDUAL OR ORGANIZATION
WITHOUT PERMISSION FROM DART AEROSPACE LTD



D3628-1F FLAT PATTERN

RELEASED
2012-05-07

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 18 GAUGE (0.050 THICK)
ANNEALED, 2B FINISH
PER MIL-S-5069 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

DESIGN	DC	DART AEROSPACE LTD	
DRAWN	DC	HAMMERSBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO.	REV. C
MFG. APPR.	DC	D3628	SHEET 2 OF 2
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	CUPPED WASHER	NTS
DATE	12.04.19	COPYRIGHT © 2007 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.	



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO038414

Supplier: GFI001-VC
GFI
180 Avenue Labrosse
Pointe Claire
QC
H9R 1A1 Canada
Phone: 514 630 4877
Fax: 514 630 4849

PO No: PO038414
PO Date: 11/20/17
Due Date: 12/11/17
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

E-MAILED
NOV 20 2017

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: COD
Freight Terms:
Special Comments:

Items

Line Item	Part	Rev	Supplier Part No	Item No	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	D3628-3P	-			Cupped Washer As Per Dwg D3628 Rev. C		Firmed	12/11/17 21	250 pcs	0 pcs x250	250 pcs	\$2.12/pcs 207	\$530.00 4m28
15-12-17.												Grand Total:	\$530.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

- A005 RIGHT OF ENTRY
- A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
- A012 CHEMICAL AND PHYSICAL TEST REPORTS
- A016 PERSONNEL QUALIFICATION
- A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
- A026 CERTIFICATION OF MATERIAL CONFORMANCE
- A041 QUALITY MANAGEMENT SYSTEM
- A042 DART NOTIFICATION BY SUPPLIER
- A043 RETENTION OF QUALITY DOCUMENT
- A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
- A049 SUPPLIER AWARENESS

(Signature)
2013

Plex 11/20/17 10:41 AM Dart.baker.diane



180 AVENUE LABROSSE
POINTE-CLAIRE, QC, CANADA H9R 1A1
TÉL.:(514) 630-4877 - FAX:(514) 630-4849

GFI est une division de Thomas & Betts Limitée / GFI is a division of Thomas & Betts Limited



BON DE LIVRAISON / SHIPPING MEMO

DATE DE LIVRAISON / SHIPPING DATE			N° DE BON DE LIVRAISON / SHIPPING MEMO NO.	PAGE
JR - DY	MO - MO	AN - YR		
12	12	17	0612169	1/1



VENDU À / SOLD TO

EXPÉDIÉ À / SHIP TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

CODE DE CLIENT / CUSTOMER CODE		N° DE CONTRAT / JOB NO.	VOTRE N° DE COMMANDE / YOUR PURCHASE ORDER NO.	EXPÉDIÉ PAR / SHIP VIA				
DART GFI-0299		0342063	PO038414					
QUANTITÉ / QUANTITY	N° DE PIÈCE / PART NO.		DESCRIPTION					
168	D3628-3P		CUPPED WASHER					
			ITEM 1					
			CERTIFICATE OF CONFORMANCE REQ					
MFG. JOB# 0342063-001 QTY 168 pcs								
DUE DATE: 11 December 2017								

EXPÉDITEUR
SHIPPER

REÇU PAR / RECEIVED BY

DATE

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

CERTIFICATE OF COMPLIANCE CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

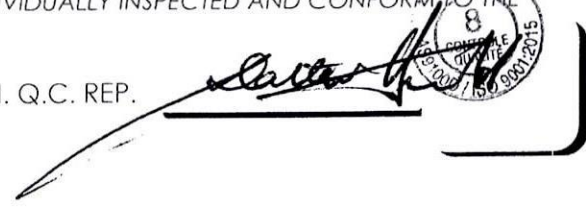
DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO.	<u>7</u>	OUR JOB NO	<u>0342063</u>	SHIPPING MEMO	<u>0612169</u>	
ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
<u>--</u>	<u>168 PCS</u>	<u>PO038414</u>	<u>D3628-3P</u>	<u>C</u>	<u>CUPPED WASHER</u>	<u>C</u>
MATERIAL		SUPPLIED BY		MAT. REL. NO.		
<u>AMS 5513 304 ANN</u>		<u>TW METALS / NORTH AMERICAN STAINLESS</u>		<u>H/N 235W</u>		

	PROCESS	PROCESSOR	RELEASE NOTE #
1	<u>FIRST ARTICLE INSPECTION REPORT ON FILE</u>	<u>GFI</u>	<u>N/A</u>
2	<u>REF. GFI MANUFACTURING JOB NUMBER 0342063-001 (168 PCS)</u>		
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 12 DECEMBER 2017

G.F.I. Q.C. REP. 





METALS
O'Neal High-Performance
Metals Group

CERTIFICATIONS

FRAUD AND FALSIFICATION STATEMENT

The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under statutes including federal law. Title 18 chapter 47.

CERTIFICATE OF COMPLIANCE

This certificate of compliance certifies that the material supplied on the purchase order number below complies in all respects with the material description and procurement specifications.

MERCURY FREE STATEMENT

TW Metals certifies that the supplies furnished under this contract contain no metallic mercury or mercury compounds, and have not come in contact with mercury or alpha bearing instruments while in the possession of TW Metals Inc.

Customer Name: BFA, Inc

Purchase Order No.: 0089283

Item number: 0002

Shipper/Invoice No.: 12107120

Material: 304

Manufacturing Mill: NAS

Specification: Ams 5573

Heat / Lot No. 2350

Size: 050

Quantity: 1 pc

Signature: Janice Clark

Date: 5/16/17



United Performance Metals

Customer Name: TW Metals - NY
 Customer PO: D12017724
 UPM Sales Order: 627379
 Date: 11/05/2017
 Description/Form: STAINLESS 304L - SHEET
 Heat Number: 235W Ingot: 02235W A

Width: 48.0000 Length: 120.0000
 Size: 0.05000
 Customer P/N:
 Packing List Number: 23690-1
 Quantity: 82 lb. 1 pc.



NORTH AMERICAN
 STAINLESS

METALLURGICAL TEST REPORT

6870 Highway 42 East
 Ghent, KY 41045-9615
 (502) 347-6000

Certificate: 248146 01 Mail To: UNITED PERFORMANCE METALS 3475 STOKES ROAD HAMILTON, OH 45015
 Customer: 0018 001 Ship To: UNITED PERFORMANCE METALS 3475 STOKES ROAD HAMILTON, OH 45015
 Date: 12/20/2016 Page: 1
 Steel: 302/304/304L
 Finish: 2B
 Your Order: M01030146 NAS Order: AN 0730596 01 Corrosion: ASTM A262/13,1803end-01

PRODUCT DESCRIPTION:

S/S COIL, C.R. ANNEALED & PICKLED; UNS 30400/30403/30200
 ASTM A240/15b, A480/15, A566/15, ASME SA240/15, SA480/15, SA566/15
 CHECK ONLY ON FOLLOWING ASTM: A276/16, A479/16, A484/15, A312/16
 CHECK ONLY ON FOLLOWING ASME: SA312/13, SA479/13
 AMS 5511B/5513J/5516P (MIL-S-5059D AND 3 EX CEN MEAS); MIL-1043B
 NACE MR0175/ISO 15156-3:2009 A, MR0103/07; Q987660-A X MAG PERM
 MECH. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED
 FINI 304L/304/302; AMS 5511B

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
 EN 10204:2004 3.1; RoHS 1 & 2 Compliant
 Material is Free of Radioactive Contamination
 Steel Making Process: EAF, AOD, & Cont. Casting
 Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
 Melted & Manufactured in the USA; Mat'l is DPAAs Compliant

Product ID #	Coil #	Thickness	Width	Weight	Length	Mark	Pieces	COMMODITY CODE
02235W A	02235W A	.0500	48.0000	15,830	COIL	2392.0	1	00624

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS CH(Country of Italy) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/14a

HEAT	CH	C %	CR %	CU %	NI %	EO %	N %	NI %	P %	S %
235W	US	.0155	18.1390	.3465	1.8175	.2785	.0911	8.0560	.0290	.0018
SI %										
.2520										

MECHANICAL PROPERTIES

Product ID #	Coil #	UTS	20C .25 YS	20C ELONG	% Hard	Tail	Grain	D Fer	WRC
		XSI	XSI	%-2"	RB	Hard	No.	P.N.	
02235W A	02235W A	F T	94.77	43.19	58.82	82.00	85.00	9.00	7.52

By: [Signature]
 Spec: ALL
 Pages 1 Date: 12/20/2016

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical Dept. Mgr. [Signature]
 KRIS LARK 12/20/2016





Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038414

Supplier: GFI001-VC
GFI
180 Avenue Labrosse
Pointe Claire
QC
H9R 1A1 Canada
Phone: 514 630 4877
Fax: 514 630 4849

PO No: PO038414
PO Date: 11/20/17
Due Date: 12/11/17
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: COD
Freight Terms:
**Special
Comments:**

Items													
Line Item	Part	Rev	Supplier Part No	Item No	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	D3628-3P	-			Cupped Washer As Per Dwg D3628 Rev. C		Firmed	12/11/17 12/21/2017	250 pcs	0 pcs	250 pcs	2.12 2.67	\$530.00
RECEIVED By Pedro at 4:24 pm, Nov 20, 2017												Grand Total:	\$530.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY
A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
A012 CHEMICAL AND PHYSICAL TEST REPORTS
A016 PERSONNEL QUALIFICATION
A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 11/20/17 1:00 PM Dart.baker.diane

APPROVED

By Pedro at 4:24 pm, Nov 20, 2017



180 AVENUE LABROSSE
POINTE-CLAIRE, QC, CANADA H9R 1A1
TÉL.: (514) 630-4877 - FAX: (514) 630-4849

GFI est une division de Thomas & Betts Limitée / GFI is a division of Thomas & Betts Limited



BON DE LIVRAISON / SHIPPING MEMO

DATE DE LIVRAISON / SHIPPING DATE			N° DE BON DE LIVRAISON SHIPPING MEMO NO.	PAGE
JR - DY	MO - MO	AN - YR		
12	12	17	0612170	1/1

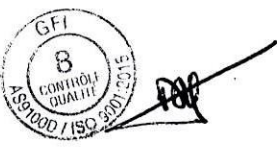


VENDU À / SOLD TO

EXPÉDIÉ À / SHIP TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

CODE DE CLIENT CUSTOMER CODE		N° DE CONTRAT JOB NO.	VOTRE N° DE COMMANDE YOUR PURCHASE ORDER NO.	EXPÉDIÉ PAR SHIP VIA
DART GFI-0299		0342063	PO038414	
QUANTITÉ QUANTITY	N° DE PIÈCE PART NO.		DESCRIPTION	
82	D3628-3P		CUPPED WASHER	
			ITEM 1	
			CERTIFICATE OF CONFORMANCE REQ	
	MFG. JOB# 0320840 - 001 QTY 82 pcs			
	DUE DATE: 11 December 2017			
				

EXPÉDITEUR
SHIPPER

REÇU PAR / RECEIVED BY

DATE

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION.
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

CERTIFICATE OF COMPLIANCE
CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas&Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO. 6 OUR JOB NO 0342063 SHIPPING MEMO 0612170

ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
--	82 PCS	PO038414	D3628-3P	C	CUPPED WASHER	C
MATERIAL		SUPPLIED BY		MAT. REL. NO.		
AMS 5513 304 ANN		TW METALS / NORTH AMERICAN STAINLESS		H/N W1D6		

	PROCESS	PROCESSOR	RELEASE NOTE #
1	FIRST ARTICLE INSPECTION REPORT ON FILE	GFI	N/A
2	REF. GFI MANUFACTURING JOB NUMBER 0320840-001 (82 PCS)		
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 12 DECEMBER 2017

G.F.I. Q.C. REP. 





1 Wright Avenue - 3rd Fl
LeRoy NY 14482
Tel: 585-768-5600
FAX: 15857685601

CERTIFICATE OF COMPLIANCE

Your Order Number: 0087456

Our delivery receipt Number: 12104780

Date: 5/24/16

This is to certify that the material shipped against the above order on the above delivery receipt, consisting of:

Quantity: 85.000 LB

Line Number: 1

Grade: 304 A AMS5513 .050

Part #: TS050481204A

Heat Number: W1D6

Specification:

Complies in all respects with the item description



By:

Jarice Clark

Authorized Test Department Clerk



METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 90832 01

Customer: 0018 001

Mail To:

UNITED PERFORMANCE METALS
3475 SYNGES ROAD
HAMILTON, OH 45015

Ship To:

UNITED PERFORMANCE METALS
3475 SYNGES ROAD
HAMILTON, OH 45015

Date: 9/01/2015

Page: 1

Steel: 302/304/304L

Finish: 2B

Corrosion: ASTM A262/14; 190Bond-OK

Your Order: 01027290

NAS Order: AN 0666814 01

PRODUCT DESCRIPTION:

S/S COIL, C.R. ANNEALED & PICKLED; UNS 30400/30403/30200
ASTM A240/15a, A480/14b, A566/15; ASME SA240/13, SA480/13, SA566/13
CHEM ONLY ON FOLLOWING ASTM: A276/13, A479/13a, A484/13a, A312/13
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5511H/5513J/5516P XMRK; MIL-S-5059D AMD3 (X CRN MEAS); MIL-4043B
NACE MR0175/ISO 15156-3:2009 A, MR0103/07; Q95766D-A X MAG PERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED
FMI 304L/304/302; AMS 5511H

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoHS 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA; Mat'l is DFRAs Compliant

Product ID	Supplier ID	Thickness	Width	Weight	-----Length-----	Mark	Pieces	COMMODITY CODE
05W1D6 B	* 05W1D6	.0500	48.0000	27.770	COIL	3349.8	11	1 00624

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS CH(Country of Mkt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical analysis per ASTM A751/08

HEAT Supplier#	CH	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
W1D6 W1D6	US	.0149	18.1560	.4340	1.7420	.4135	.0811	8.0375	.0315	.0010
Lab Check:		.0147	18.1547	.4238	1.7604	.4068	.0807	7.9402	.0294	.0044
SI %		.2645								
Lab Check:		.2242								

MECHANICAL PROPERTIES

Product Id	Supplier Id	1 d 2 i c r	UTS KSI	20C .2% YS KSI	20C ELONG %-2"	% Hard RH	Tail Hard	Grain No.	D For P.N.
05W1D6 B	05W1D6	F T	97.34	51.72	46.12	88.50	86.50	9.00	3.53

UPMQC
Review / Approved
Specyall
By: PL 9-2-15
Page: 1

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

Abhijeet Bhawe

9/01/2015

UNITED PERFORMANCE METALS
This is to certify that in accordance with the terms in
our files this material shipped on your purchase order
conforms to the following:

Size: 48 X 120
P.O.: D12017071
Prod: NAS GHENT, KY
Sales: 01027290
Quantity: 1

Description: 304/304L, 040, 052 AMS5513
Customer: GFI, Incorporated
Shipper: 0506/2016
Heat: W1D6



UPMOC
Review/Approved
Spec: All
By: [Signature] 9/3/15
#Page: 1